APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,273	02/24/2004	Lowell L. Winger	03-1431 1496.00341	3873

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EXAMINER
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ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
06/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/785,273	WINGER ET AL.
	Examiner	Art Unit	
	Chikaodili E. Anyikire	2621	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 February 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 February 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>06/10/2005</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This application is responsive to application number (10/785273) filed on

February 24, 2004. Claims 1 – 29 are pending and have been examined.

Information Disclosure Statement

2.   Acknowledgement is made of applicant's information disclosure statement.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

4.   Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Jeon

(2004/0066848).

As per claims 1 and 10, Jeon discloses a method and apparatus for determining

a first and a second reference picture used for inter-prediction of a block, comprising the

steps of:

(A) finding a co-located picture and block ([0088] Ln 1-2);

(B) determining a reference index ([0088] Ln 9-12 and [0089]);

(C) mapping the reference index to a lowest valued reference index in a current

reference list ([0090]); and

(D) using said reference index to determine said second reference picture ([0088] Ln 9-12; the prior art discloses two reference pictures in a list0 and list1, which represents a first and second reference picture).

As per claims 2 and 11, Jeon discloses the method and apparatus according to claims 1 and 10, wherein said block comprises an H.264 direct-mode macroblock or macroblock partition ([0011] Ln 6 – 10; the prior art discloses the direct-mode in conjunction H.264 on a slice level and can also be performed on a marcoblock since a slice is made up of marcoblocks.).

As per claims 3 and 12, Jeon discloses the method and apparatus according to claims 1 and 10, wherein step (C) further comprises:

storing a unique identifier for each reference picture ([0005] Ln 1-4; the prior art discloses a buffer, which is used to store the reference picture and an index to identify the reference picture), wherein said unique identifier is associated from (i) when said unique identifier was used as an inter-reference in the co-located picture to ([0097]) (ii) when said unique identifier is made available as a potential List0 inter-reference for the current picture ([0097).

As per claims 4 and 13, Jeon discloses the method and apparatus according to claims 1 and 10, further comprising the step of:

storing a unique identifier of a direct-mode reference picture ([0005] Ln 1-4; the prior art discloses a buffer, which is used to store the reference picture and an index to identify the reference picture).

As per claims 5 and 14, Jeon discloses the method and apparatus according to claims 4 and 13, wherein said direct-mode operates on (i) a macroblock when in a first configuration and (ii) a macroblock partition when in a second configuration ([0087], the prior art discloses four different combination, configurations, for a frame mode and field mode, which are made up of macroblocks; the prior art discloses performing the method on a slice level ([0011] Ln 6-11)).

As per claims 6 and 15, Jeon discloses the method and apparatus according to claims 4 and 13, further comprising the step of:

searching the current reference List0 for the lowest valued reference index identifier by said unique identifier and returning the value of said lowest valued ` reference index ([0090]; the prior art discloses search for the lowest reference index, unique identifier, and return the value by determining the reference picture index).

As per claims 7 and 16, the method and apparatus according to claims 1 and 10, wherein said method and apparatus further comprising the step of:

implementing an interpolative direct-mode prediction and a flexible choice for the picture referenced by a finite index reference ([0093]; the prior art discloses performing a motion vector prediction, interpolative direct-mode prediction, and the reference pictures are referenced by an index number that is finite).

As per claims 8 and 17, Jeon discloses the method and apparatus according to claims 1 and 10, wherein said method is implemented in a video encoder ([0014] Ln 2-5

and [0018] Ln 4; the prior art discloses a coding system and makes reference to a compression technique) .

As per claims 9 and 18, Jeon discloses the method and apparatus according to claims 1 and 10, wherein said method is implemented in a video decoder ([0018] Ln 1-8; the prior art discloses a coding system and makes reference to a decoded picture therefore a decoder is part of the coding system, which is well known in the art).
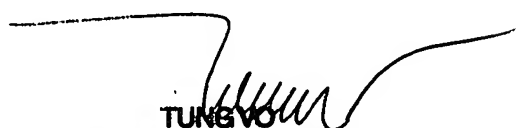
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272 - 7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a
USPTO Customer Service Representative or access to the automated information
system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CEA

TUNG VO
PRIMARY EXAMINER